

Peer Review File

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Reviewer A

The authors should be applauded for undertaking a study of POLST forms completed by outpatient vs inpatient providers. This is an important and timely topic given the global rise of hospital medicine. I found the results of this paper to provide a very interesting anecdote that palliative care providers internationally may benefit from reading, as it will continue to push the field of palliative care toward upstream interventions that address goals of care prior to hospitalization.

Large Feedback Items:

Comment 1: *Many times, the manuscript states that this is a study of “POLST completion characteristics” or “characteristics of POLST completed by hospitalists.” I find this phrase difficult to parse and I’m not sure it accurately represents the results presented in the manuscript. The results actually reported in the manuscript seem to be things such as: (a) proportion of POLST forms for admitted patients that were completed by hospitalists as opposed to other providers; (b) proportion of POLST forms completed by inpatient vs outpatient providers; (c) proportion of admitted patients with POLST forms who had either cancer or non-cancer illnesses. The authors do not need to use the language I suggest here, but I do think that “POLST completion characteristics” is difficult to understand and does not reflect the diversity of results presented.*

Reply 1: Thank you for your recommendation. We deleted the expression of “POLST completion characteristics”, which is difficult to understand and modified the title, abstract and introduction.

Changes in text 1:

[Title]

Before: Characteristics of the Physician Orders for Life-Sustaining Treatment (POLST) completed by Hospitalists: A Cross-Sectional Study

After: Effect of outpatient physician involvement on the physician orders for life-sustaining treatment completed by hospitalists: A cross-sectional study

[Abstract, Background]

Before: The purpose of this study was to analyze the characteristics of physician orders for life-sustaining treatment completed by hospitalists.

After: However, hospitalists are not physicians who have continuously treated patients in outpatient settings; hence, the continuity of care may be poor. We aimed to analyze the effect of outpatient physician involvement on the physician orders for life-sustaining treatment completed by hospitalists.

[Introduction, 5th paragraph]

Before: In this study, we analyzed the characteristics and results of POLST implementation in patients who received explanations from hospitalists. In addition, we investigated the role and significance of hospitalists in the completion of POLST completion.

After: In this study, we aimed to analyze the results of POLST implementation in patients who discussed the treatment with hospitalists who completed POLST. In addition, we aimed to investigate the effect of outpatient physician involvement on POLSTs completed by hospitalists.

***Comment 2:** For me as a reader, the main takeaway of this paper is: when outpatient providers are involved in the completion of a POLST form, patients are more likely to have completed the POLST form themselves, and the POLST form is more likely to indicate less aggressive EOL care (e.g., comfort oriented measures). However, temporal trends indicate that hospitalists and surrogates are completing an increasing number of POLST forms. This may represent a threat to the quality and goal-concordance of EOL care and should be addressed, possibly through measures designed to increase the involvement of outpatient providers in goals of care discussions, especially for patients with non-cancer illnesses. I am not sure if the authors would agree with the way I have put the results of the paper together – but if they agree, I feel like this could be more clearly stated in the abstract conclusion. (It is better stated in the conclusion of the manuscript text itself).*

Reply 2: We totally agree with your mention. We revised the conclusions of the abstract and manuscript text.

Changes in text 2:

[Abstract, Conclusions]

Before: Outpatient physicians participated in the hospitalists' physician orders for life-sustaining treatment completion in less than half of the cases. Unnecessary life-sustaining treatment was reduced when outpatient physicians participated in physician orders for life-sustaining treatment completion.

After: Life-sustaining treatment was reduced when the outpatient physicians participated in the completion of physician orders for life-sustaining treatment. Using measures to increase the involvement of outpatient providers in goal care discussions, the quality and goal concordance of end-of-life care can be improved.

[Conclusions, 1st paragraph]

Before: In conclusion, POLST completion by hospitalists is gradually increasing. Outpatient physicians participated in the hospitalists' POLST completion in less than half of the cases, and futile LST was reduced when outpatient physicians were involved in POLST completion.

After: Outpatient physicians participated in POLST completion by hospitalists in less than half of the cases, and non-goal-concordant LST was reduced when the outpatient physicians were involved in POLST completion. Therefore, it is important to increase the continuity of care through the active participation of outpatient physicians in the EOL care of patients.

***Comment 3:** Since this is an international journal, not all readers will be familiar with the Korean context. The context already provided by the authors in the introduction is very good, but more is needed. Specifically, readers would benefit from knowing: (a) for the process of POLST completion described in Figure 1 and in the text of the*

manuscript – does this represent the ideal process as described by legislators? By medical ethics literature? By societal guidelines? Additionally, is there any information on how consistently this process is followed? (b) POLST forms vary significantly in their design depending on where they are adopted. I found it difficult to understand the results at times because I did not understand the specifics of the POLST form being used (I realize the authors described the “subjects” of the POLST form in the methods, but I did not find that this provided the needed information). For example, does the POLST form address specific LSTs through checkboxes (e.g., hemodialysis, ECMO, etc), or does it only address overall categories of treatment intensity (e.g., Full Treatment, Limited Treatment, Comfort-Focused Treatment?). If possible, it may be good to include a facsimile of the form, or more specific information of what the actual form looks like, or a link to an English translation of the form.

Reply 3 (a): Thank you for the recommendation. POLST process in Korea is not carried out autonomously by each medical institution, but the country stipulates the specific method by law. This was additionally explained in the third paragraph of the method to help international readers understand.

Changes in text 3 (a):

[Methods, 3rd paragraph]

Before: This process is summarized in the flowchart in Figure 1.

After: This process is summarized in the flowchart in Figure 1. This flowchart was created in accordance with the laws presented in the Life-Sustaining Medical Decision Act of Korea.

Reply 3(b): The POLST format commonly used in Korea was translated into English and attached as a supplementary material.

Changes in text 3 (b): [Supplementary material]

Statement of implementation of decision on suspension of life-sustaining treatment

Patient	Name	Resident Registration Number
Physician	Name	License Number
	Affiliated Medical Institution	
Medical Institution	Name of the Medical Institution	Medical Institution Number
	Address	Telephone Number
Date		
Life-Sustaining Treatment	<input type="checkbox"/> Cardiopulmonary Resuscitation <input type="checkbox"/> Mechanical Ventilation <input type="checkbox"/> Hemodialysis <input type="checkbox"/> Chemotherapy <input type="checkbox"/> Extracorporeal Membrane Oxygenation <input type="checkbox"/> Transfusion <input type="checkbox"/> Vasopressor Drugs	
The method of confirmation of the patient's decision	<input type="checkbox"/> Advance directive <input type="checkbox"/> POLST by the patient <input type="checkbox"/> POLST by two family members <input type="checkbox"/> POLST by all family members	

Date

Signature of the physician

Comment 4: *There are a variety of minor issues with word choice and/or clarity in academic English throughout the manuscript. They are minor and rarely impede understanding, but it is recommended that the manuscript undergo further editing.*

Reply 4: As you mentioned, we have got the manuscript checked again from an English editing service although it was performed at the time of initial submission. Moreover, the certificate of English editing is attached in this response letter.






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Reviewer B

Really enjoyed reading this paper! Overall, it is very clearly-written and informative, underlining an important challenge facing inpatient physicians. While they may be present at the moment of changing disease course, hospitalists do not have the benefit of an established trust relationship with the patient. The authors are successfully able to associate this with a decreased likelihood of limitations on LST when a continuity physician is not involved.

My suggestions below almost entirely relate to wording/word choice and sentence flow.

Comment 1: *Page 1, line 22 - Please reword the first sentence of the abstract. Suggestion: Hospitalists are increasingly involved in end-of-life care decision-making.*

Reply 1: Thank you for the recommendation. We reworded the first sentence of the abstract.

Changes in the text 1:

[Abstract, Background]

Before: Hospitalists are increasingly experiencing end-of-life care for their patients.

After: Hospitalists are becoming increasingly involved in end-of-life care decision making.

Comment 2: *Page 1, line 36 - Please replace 'to' with 'from in the second sentence of the 'Results' in the abstract section. I.e.: ... "completed by hospitalists gradually increased from 2.53% in 2018, to 4.58% in 2019, and 15.9% in 2020."*

Reply 2: Thank you for the mention. We replaced the words.

Changes in the text 2:

[Abstract, Results]

Before: The physician orders for life-sustaining treatment completed by hospitalists gradually increased to 2.53 % in 2018, 4.58% in 2019, and 15.9 % in 2020.

After: The proportion of physician orders for life-sustaining treatments completed by hospitalists gradually increased from 2.53% in 2018 to 4.58% in 2019 and 15.9% in 2020.

Comment 3: *Page 1, line 37 - I would recommend using numerics instead of spelling out number. I.e.: 144 (82.3%) patients.*

Reply 3: We used numerics instead of spelling as your recommendation.

Changes in the text 3:

[Abstract, Results]

Before: One hundred forty-four (82.3%) patients had malignancy and 31 (17.7%) patients had non-cancer illness.

After: A total of 144 (82.3%) patients had malignancies, while 31 (17.7%) patients had non-cancer illnesses.

Comment 4: *Page 2, line 60 - Please divide into two sentences - start a new sentence after 'quality of care' and before 'since then.'*

Reply 4: We divided into two sentences as your mention. Thank you for the

recommendation.

Changes in the text 4:

[Introduction, 1st paragraph]

Before: The hospitalist system in Korea was first introduced in 2015 to reduce the working hours of medical residents and improve the quality of care, since then, it has been gradually expanded to many hospitals.

After: The hospitalist system in Korea was first introduced in 2015 to reduce the working hours of medical residents and improve the quality of care. Since then, it has been gradually expanded to many hospitals.

Comment 5: Page 2, line 66-69 - I would recommend rewording this sentence. There may be unintended implications from the words 'prevent' and 'no possibility of resuscitation.' I have no experience with the culture or law governing medical care in Korea, so I may be mistaken. My suggestion for rewording would be: "The Life-Sustaining Medical Decision Act is a law that protects patients that consider resuscitative efforts to be at odds with their goals of care from undesired life-sustaining treatments, either by their own decision or the consent of their surrogates"

Reply 5: Thank you for the recommendation. We reworded as your suggestion.

Changes in the text 5:

[Introduction, 2nd paragraph]

Before: The Life-sustaining Medical Decision Act is a law that prevents patients with no possibility of resuscitation from futile life-sustaining treatment (LST) by their own decision or the consent of their surrogates.

After: The Life-Sustaining Medical Decision Act is a law that protects patients who consider resuscitative efforts to be at odds with their goals of care from undesired life-sustaining treatments (LSTs), through their own decision or the consent of their surrogates.

Comment 6: Page 2, line 79 - Please reword the first sentence, replacing 'experience.' Hospitalists are increasingly involved in end-of-life care decision-making. Additionally, please cite this claim. You demonstrate this later in the paper, but is there previous evidence that supports this claim?

Reply 6: We reworded the first sentence, replacing 'experience' to 'involve' and cited this claim.

Changes in the text 6:

[Introduction, 4th paragraph]

Before: Hospitalists are increasingly experiencing EOL care for their patients.

After: Hospitalists are becoming increasingly involved in EOL care decision making for their patients (8).

[References]

8. Auerbach AD, Pantilat SZ. End-of-life care in a voluntary hospitalist model: effects on communication, processes of care, and patient symptoms. *Am J Med* 2004;15:669-75.

Comment 7: Page 2, line 79-85 - I would recommend adding to this paragraph, specifically explaining how an inpatient stay may be an opportunity for patients to consider whether they want additional hospitalization or where they are in the course of their disease. It would help adding a sentence after the first one that discusses the common prompts for these conversations with inpatients. In the US, POLST is most useful for emergency medical providers (who are usually not physicians) to prevent unwanted resuscitation and transfer so completion before d/c from hospital would be useful to avoid hospitalization or transfer to ICU if those were not wished.

Reply 7: Thank you for your mention. We added your recommendation to this paragraph.

Changes in the text 7:

[Introduction, 4th paragraph]

Before: Hospitalists are increasingly experiencing EOL care for their patients. It is important to determine whether to implement LST for patients in the EOL process or not, and for patients who have not yet decided on this, hospitalists are involved in the completion of the POLST.

After: Hospitalists are becoming increasingly involved in EOL care decision making for their patients (8). **An inpatient stay may be an opportunity for patients to consider whether they want additional hospitalization or where they are in the course of their disease. While patients are in the hospital, they can have in-depth consultations with hospitalists and have a lot of time to plan such things.** Hence, it is important to determine whether the LST should be implemented in patients during the EOL process; for patients who have not yet decided on this, hospitalists are involved in the completion of POLST.

Comment 8: Page 2, line 82-85 - Recommend removing all commas except the first one from this sentence as they make it choppy.

Reply 8: Thank you for the recommendation. We removed all commas except the first one from this sentence.

Changes in the text 8:

[Introduction, 4th paragraph]

Before: Because hospitalists are not physicians who have continuously treated patients in an outpatient setting, the continuity of care may be poor, and it may be difficult to form a rapport with patients and caregivers, which may act as a major obstacle for hospitalists to complete POLST.

After: **Because hospitalists are not physicians who have continuously treated patients in an outpatient setting, the continuity of care may be poor. Moreover, it may be difficult for hospitalists to establish a rapport with patients and caregivers, creating a major obstacle for POLST completion.**

Comment 9: Page 2, line 86-88 - Consider using different word from 'explanations.' Perhaps "who discussed EOL care options" or "who discussed and completed a POLST with hospitalists."

Reply 9: We used different words, 'discuss and complete' instead of 'explanations'.

Thank you for the recommendation.

Changes in the text 9:

[Introduction, 5th paragraph]

Before: In this study, we analyzed the characteristics and results of POLST implementation in patients who received explanations from hospitalists.

After: In this study, we aimed to analyze the results of POLST implementation in patients who discussed the treatment with hospitalists who completed POLST.

Comment 10: Page 3, line 97 - Would use different word than 'obtain.' Likely 'completed POLST with.'

Reply 10: Thank you for the recommendation. We change the word 'obtain' to 'complete'.

Changes in the text 10:

[Methods, 3rd paragraph]

Before: Hospitalists obtained POLST from patients or their legal representatives in the following way:

After: The hospitalists completed POLST with patients or their legal representatives in the following manner:

Comment 11: Page 3, line 102 - Reword 'If there was objective evidence that the patient would not receive LST.' Likely: "... that the patient would not benefit from"

Reply 11: Thank you for the recommendation. The meaning of 'objective evidence' refers to a will or video of a patient. An additional explanation for 'objective evidence' was needed. So we added examples of objective evidence to the sentence.

Changes in the text 11:

[Methods, 3rd paragraph]

Before: In the absence of consciousness, if there was objective evidence that the patient would not receive LST, a statement from two family members was required.

After: In the absence of consciousness, if there was objective evidence such as a living will or video to prove that the patient would not receive LST, a statement from two family members was required.

Comment 12: Page 4, line 162 - I am assuming that you mean 'comfort measures only, which means that patients did not wish to receive any LST.'

Reply 12: Thank you for the recommendation. We changed a description of 'comfort measures only'.

Changes in the text 12:

[Results, 4th paragraph]

Before: Only 23 (13.1 %) patients selected 'comfort measures-only', which means that patients did not receive any LST, and 152 (86.9 %) patients chose limited intervention as LST.

After: Only 23 (13.1%) patients selected "comfort measures only," which means that the patients did not wish to receive any LST, and 152 (86.9%) patients chose limited intervention as LST.

Comment 13: Page 4, line 167 - Would replace 'intervened' with 'participated.'

Reply 13: We replaced 'intervened' with 'participated'.

Changes in the text 13:

[Results, 5th paragraph]

Before: Table 3 shows the differences according to whether outpatient physicians intervened in the POLST completion process.

After: Table 3 shows the differences according to the status of outpatient physician participation in the POLST completion process.

Comment 14: Page 4, lines 167-175 - Very interesting findings - I found myself asking if (for cancer patients) the outpatient physician was an oncologist. In the US, oncologists are very involved in their patients' care and do both inpatient and outpatient work. Are these outpatient physicians universally the patients' primary care provider, or are they a different subspecialty?

Reply 14: These outpatient physicians mean oncologists. They are not a different subspecialty. Before oncological co-management with hospitalists, oncologists were very involved in their patient's care and did both inpatient and outpatient work. However, after oncological co-management start, oncologists mainly do outpatient work.

Comment 15: Page 5, lines 181-183 - Repetitive, much of this information was mentioned in the introduction (page 2, lines 59-61). You might say "Since its introduction in 2015, the hospitalist system in Korea has evolved and diversified to now include work in quality improvement and inpatient safety. However, the role of the hospitalist is not standardized...."

Reply 15: We changed the sentence as your mention. Thank you for the recommendation.

Changes in the text 15:

[Discussion, 1st paragraph]

Before: In Korea, the hospitalist system began as a way to reduce the working hours of medical residents in 2015 (8). As time passed, the role of hospitalists has diversified to improve quality improvement and inpatient safety. The role of the hospitalist is not standardized and varies according to the needs of each hospital.

After: Since its introduction in 2015, the hospitalist system in Korea has evolved and diversified; it now includes quality improvement and inpatient safety (10). However, the role of the hospitalist has not been standardized and varies according to the needs of each hospital.

Comment 16: Page 5, line 186 - Do you mean 'unassigned patients,' i.e. patients without a regular/primary care doctor?

Reply 16: We listed the areas covered by the hospital medicine group based on a 2014 survey by the Society of Hospital Medicine. As you pointed out, the meaning of 'unassigned patients' is unclear and it is not important in the context of the flow. So we decided to omit this 'unassigned patients'.

Changes in the text 16:

[Discussion, 1st paragraph]

Before: According to the 2014 survey of the Society of Hospital Medicine, hospitalists play various roles, including primary care physician referral, unassigned patients, medical co-management, palliative care, and others.

After: According to the 2014 survey of the Society of Hospital Medicine, hospitalists play various roles, including primary care physician referral, medical co-management, palliative care, and others.

Comment 17: Page 5, line 187 - Please define 'here.' Do you mean as you found in this study, as found in your hospital in another survey/study, or do you mean your medical system generally?

Reply 17: The word 'here' means the 2014 survey of the Society of Hospital Medicine. We changed 'here' to 'this survey'. Thank you for the recommendation.

Changes in the text 17:

[Discussion, 1st paragraph]

Before: As reported here, 15.6% of hospital medicine groups for adults took charge of palliative care.

After: As reported in this survey, 15.6% of the hospital medicine groups for adults were responsible for providing palliative care.

Comment 18: Page 5, line 193 - Would consider changing the word 'inevitable.' Perhaps commonplace, or usual?

Reply 18: Thank you for the recommendation. We changed the word 'inevitable' to 'usual'.

Changes in the text 18:

[Discussion, 2nd paragraph]

Before: As oncological co-management started at SNUBH from January 2020, it has become inevitable for hospitalists to manage palliative care for patients with malignant disease.

After: After the implementation of oncological co-management in SNUBH in January 2020, it has become usual for hospitalists to provide palliative care for patients with malignant disease.

Comment 19: Page 5, line 205 - Simplify sentence: instead of "with various chronic diseases as well as cancer," suggest "... the number of patients with chronic diseases unrelated to cancer..."

Reply 19: We simplified the sentence as your recommendation.

Changes in the text 19:

[Discussion, 3rd paragraph]

Before: With the rapid aging of the population and the further development of medical science, the number of patients with various chronic diseases as well as cancer continues to increase, so the hospitalization of these patients will also increase.

After: With the rapid aging of the population and the development of medical science,

the number of patients with chronic diseases unrelated to cancer continues to increase; hence, the hospitalization rate of these patients will also increase.

Comment 20: Page 5, line 207 - Change 'highlighted' to 'increase' or 'become more important.'

Reply 20: We changed 'highlighted' to 'become more important'.

Changes in the text 20:

[Discussion, 3rd paragraph]

Before: Therefore, the role of hospitalists in terms of EOL care and POLST completion will also be highlighted.

After: Therefore, the role of hospitalists in terms of EOL care and POLST completion will become more important.

Comment 21: Page 5, line 208 - Place clause starting 'which' and ending with 'management continuity' in parentheses for ease of reading.

Reply 21: Thank you for the recommendation. We divided the sentence to two sentences to make it easier to read.

[Discussion, 4th paragraph]

Changes in the text 21:

Before: Continuity of care, which consists of provider continuity, information continuity, and management continuity, commonly affects patient satisfaction (9).

After: Continuity of care commonly affects patient satisfaction. It consists of provider continuity, information continuity, and management continuity (11).

Comment 22: Page 6, line 259 - Would consider use of word other than 'futile.' Perhaps 'non-goal-concordant.'

Reply 22: We change the word 'futile' to 'non-goal-concordant'.

Changes in the text 22:

[Conclusions, 1st paragraph]

Before: Outpatient physicians participated in the hospitalists' POLST completion in less than half of the cases, and futile LST was reduced when outpatient physicians were involved in POLST completion.

After: Outpatient physicians participated in POLST completion by hospitalists in less than half of the cases, and non-goal-concordant LST was reduced when the outpatient physicians were involved in POLST completion.

Reviewer C

So I think the paper has value as hospitalist physicians will be charged with completing do not resuscitate as well as physicians orders for life sustaining treatment when there is no service available in the institution to do so. So what is really important then is the hospitalist training to actually be involved in the process so that it is non biased and done in a way that focuses on patient centered care as well as shared decision making. It is not uncommon for primary care physicians, especially in the United States now to

create physicians orders for life sustaining treatment. What has occurred is that we do see a fair amount of inappropriate use in populations who should not have a physicians order for life sustaining treatment because they are way too healthy.

What becomes even more concerning is the level of conversations that primary care physicians have as well as subspecialists have in the role of completing a physicians order for life sustaining treatment. Quite often they are very biasing and portrayed in a negative fashion so that patients will select do not resuscitate as well as comfort or limited additional treatment measures. What I find odd here is that there is no CPR full treatment order that was selected by any of the patients which then speaks to the issue of how the information was portrayed to patients. Statistically speaking if something was done in an informed fashion it would not be statistically possible to not have one patient who opted to receive full treatment with CPR.

What I also found interesting in this study and more can be found in looking at a study called TRIAD XII which evaluated the level of discordant do not resuscitate as well as physicians orders for life sustaining treatment upon presentation to a hospital system. That study found surprisingly high levels of discordant understanding between the patient an whichever team created that physicians order for life sustaining treatment. Furthermore, patients were often unaware that the order existed in their medical records and I did not see how that was evaluated here to see if patients actually agreed with it after it was created.

I am going to list our comments according to the line numbers in the document and I do think the paper has value as hospitalist will be charged with completing more of these documents. But I do think the paper needs to be improved upon to speak two issues of appropriate conversations appropriate training appropriate documentation as well as a verification process to make sure that what was documented is actually informed consent by the patient and is based upon the principles of shared decision making any patient centered focus.

At this time, I would like to see revisions prior to giving my recommendations of accepting but based upon my recommendations I do think the paper can be accepted if it is improved upon the recommendations provided. Additionally I would suggest that they actually publish an image of The POLST form utilized.

Comment 1: *Line 46-I would strike the word unnecessary as right now I do not see that there is a process here to determine what was necessary versus unnecessary. I would suggest rewording this statement as life sustaining treatment was reduced when outpatient physicians participated in physicians orders for life sustaining treatment completion. However this study did not evaluate the level of discordance of those orders and that should be evaluated in future research as discordance should be viewed as a medical error. (Ref TRIAD XII and Hickman Study)*

Reply 1: Thank you for the recommendation. We agree with your opinion of life-sustaining treatment. We modified the sentence according to your recommendations.

Changes in the text 1:

[Abstract, Conclusion]

Before: Unnecessary life-sustaining treatment was reduced when outpatient physicians participated in physician orders for life-sustaining treatment completion.

After: Life-sustaining treatment was reduced when the outpatient physicians participated in the completion of physician orders for life-sustaining treatment.

Comment 2: Line 73-the beginning of this statement should be reworded to reflect the intention of the POLST. The POLST is a standardized medical order that is supposed to record a discussion between a physician and a patient with serious disease.

Reply 2: We modified the sentence as you mention. Thank you for your recommendation.

Changes in the text 2:

[Introduction, 3rd paragraph]

Before: The POLST is a standardized medical order that records a discussion between a physician and a patient with a serious disease.

After: The POLST, which was initially implemented in 1993 at the Oregon Health Sciences University, is a standardized medical order that is supposed to record a discussion between a physician and a patient with a severe disease.

Comment 3: Line 78- I think they need to explain here why they're using this form over the standard do not resuscitate order form. Additionally, I think they need to also put a statement in here stating that although the POLST offers more information than a standard DNR form, however that there are still patient safety concerns that can emerge with POLST that relate to discordant understanding between the patient as well as the provider completing the POLST and that POLST forms have been shown to have issues related to discordant medical care as shown in both research and simulation studies. (TRIAD XII, TRIAD X Sim, Lee Study with Discordant ICU care and Hickman study).

Reply 3: We agree with your opinion. In Korea, the Life-Sustaining Treatment Decision Act was applied in the clinical setting under the government's initiative, and the government decided to use the POLST form as part of the EOL care. We additionally described the limitations of POLST and the background for using the POLST form over the DNR order form.

Changes in the text 3:

[Introduction, 3rd paragraph]

Before: Contrary to the form like 'Do Not Resuscitate (DNR)', the POLST delivers more information on the types of EOL intervention that the patient with terminal disease chooses to receive (6).

After: Contrary to the "do not resuscitate (DNR)" form, POLST includes more information on the types of EOL intervention that the patient with terminal disease chooses to receive (6). Although POLST offers more information than a standard DNR form, there are patient safety concerns that relate to the discordant understanding between the patient and the provider completing POLST (7). In Korea, the Life-Sustaining Treatment Decision Act was applied in the clinical setting under the government's initiative, and the government decided to use the POLST form as part of the EOL care.

Comment 4: Line 103 such as what? For example, what indications are they utilizing to complete this form? The indications are a frail elderly patient with a serious medical illness or expected to die within a year. Was this utilized or was it more just the perception that the patient would not benefit from life sustaining treatment. And if so was full resuscitation as far as the treatment provided as an option or was it just a direction to not pursue life sustaining treatment.

Reply 4: The indications of POLST completion are patients nearing EOL and patients with terminal disease. These indications are defined as the statutory provisions in the Life-Sustaining Medical Decision Act. We added a paragraph to explain this.

Changes in the text 4:

[Methods, 2nd and 3rd paragraph]

Before: Hospitalists obtained POLST from patients or their legal representatives in the following way:

After: POLST completion was conducted in patients nearing EOL and patients with terminal disease. EOL and terminal disease are defined as statutory provisions in the Life-Sustaining Medical Decision Act. The EOL process refers to a condition in which there is no possibility of recovery despite treatment, the symptoms worsen rapidly, and death is imminent. Terminal diseases are defined as diseases with life expectancy of less than several months due to irreversible organ dysfunction. The above two situations are determined based on the medical judgment of the doctor in charge and one medical specialist in the relevant field.

The hospitalists completed POLST with patients or their legal representatives in the following manner:

Comment 5: Line 114- did the hospitalist physicians received training on how to have a conversation or complete the form? If so list the training provided if not state that specifically in the limitations.

Reply 5: Thank you for your recommendation. The hospitalist physicians received training on how to have a conversation and complete the form.

Changes in the text 5:

[Methods, 4th paragraph]

Before: After the hospitalists explain the procedures and complications of LST, they decide whether to perform these procedures.

After: After the hospitalists explain the procedures and complications of LST, they decide whether to perform these procedures.

The hospitalist physicians underwent training on how to have a conversation and complete the form on January 31, 2018. The hospitalists who could not attend on that day were required to undergo a video training.

Comment 6: Line 189-I think the paper would benefit from an additional statement here. For example as such it becomes very important to evaluate how hospitalists have this conversation to ensure it is non biased and that the forms get created without error. (TRIAD XII shows the Error rates. TRIAD X Sim can help to ensure the level of training and competency)

Reply 6: Thank you for your recommendation. We added the sentence about training and medical errors to the end of 1st paragraph of discussion.

Changes in the text 6:

[Discussion, 1st paragraph]

After: According to one study, POLST sometimes does not reflect the patient wishes well (7), so it is important to train the hospitalists to prevent these medical errors.

Comment 7: Lines 200 through 207-was there not one patient who selected CPR full treatment? Or do not resuscitate with full treatment? If so why not was this an issue of how the information was portrayed because it appears biasing towards declining which would be a bias of the study itself.

Reply 7: According to the Life-Sustaining Medical Decision Act of Korea, patients who want CPR full treatment are not eligible for POLST completion. We added this to the end of the method, 3rd paragraph.

Changes in the text 7:

[Methods, 3rd paragraph]

After: According to this act, although a certain patient was in the EOL process due to terminal disease, if the patient wanted full treatment including cardiopulmonary resuscitation, the patient was excluded from the indication of POLST.

Comment 8: Lines 214,215-I think there should be more on this issue of continuity and how there is a natural breakdown of continuity because the hospitalist physicians do not get involved in the outpatient setting. There was a paper called TRIAD VIII that looked at scripted video and both audio and video supplements are now becoming more available which may be able to help bridge this issue in the future. The reason I add this issue as the statement made in lines 218 and 219 are not a trusted viable solution.

Reply 8: We agree with your opinion. We described the video testimonial/message introduced in TRIAD VIII as one of the ways to overcome the discontinuity of the hospitalist.

Changes in the text 8:

[Discussion, 4th paragraph]

Before: If a patient does not have AD or has not even discussed LST before being admitted to a hospitalist ward and is faced with death due to aggravation of the disease, hospitalists and patients who have to decide on LST will face considerable confusion.

After: If a patient does not have AD or has not discussed LST prior to his or her admission to a hospitalist ward and is nearing EOL due to the aggravation of the disease, the hospitalists and patients who have to decide on the level of LST will experience considerable confusion. To overcome this problem, The Realistic Interpretation of Advance Directives (TRIAD) VIII research was conducted, where a video testimonial/message was found to improve communication between patients and medical providers (13).

Limitation section

Comment 9: Line 244 all hospitalists are not trained the same and may have different

levels of understanding of how to have a conversation or to complete a form. For example one physician may believe a DNR order is an end of life order and another may understand it differently to assume that it only applies to treatment when pulseless or apneic when in cardiac arrest.

Reply 9: Thank you for your recommendation. As described above, the use of the POLST form in Korea is enacted by law, and therefore levels of understanding of how to have a conversation and to complete a form is standardized. We have elaborated on these issues in methods for foreign readers to understand the situation of Korea.

Changes in the text 9:

[Methods, 3rd paragraph]

Before: This process is summarized in the flowchart in Figure 1.

After: This process is summarized in the flowchart in Figure 1. **This flowchart was created in accordance with the laws presented in the Life-Sustaining Medical Decision Act of Korea.**

***Comment 10:** Another limitation that they need to speak to in this study is that this study actually took the POLST forms completed by the primary care physician as an outpatient as a verified correct form there was nothing done to actually verify that what was documented on the form actually equated with the patient or health care agents understanding of what was to or not to be performed. This again was shown in a TRIAD XII study.*

Reply 10: Thank you for the recommendation. We agree with your opinion. However, we think that that limitation is a limitation of POLST and is not of this study.

***Comment 11:** Another limitation of the study is that there were no forms that were completed that said CPR full treatment on them which suggests there could be biases present within the study as to the patient selection or to the individual physicians involved in the study process.*

Reply 11: According to the Life-Sustaining Medical Decision Act of Korea, patients who want CPR full treatment are not eligible for POLST completion. We added this to the end of the method, 3rd paragraph.

Changes in the text 11:

[Methods, 3rd paragraph]

After: **According to this act, although a certain patient was in the EOL process due to terminal disease, if the patient wanted full treatment including cardiopulmonary resuscitation, the patient was excluded from the indication of POLST.**